

## ABSTRACT

**SUPER-THIN HIGH SPEED FLIP CHIP PACKAGE**

A chip package achieves miniaturization and excellent high-speed operation by employing flip chip interconnection between the die and the package substrate, and mounting the chip on the same side of the package substrate as the solder balls for the second level interconnection to the printed circuit board. Also, two-die packages have a first die attached to the same surface as the second level interconnect structures and connected using flip chip interconnection, and a second die connected to the opposite surface of the substrate and interconnected either by wire bonding or by flip chip interconnection.

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